What is claimed is:

1. A method for concurrently processing digital video frames and high resolution still images in burst mode, comprising:

acquiring regular size video frames and high resolution still image frames in burst mode from one or more image sensors;

downsampling the regular size video frames into reduced size video frames, wherein the reduced size frames have frame sizes smaller than the regular size video frames;

processing the high resolution still image frames acquired during the burst mode using a high resolution still image pipeline; and

processing the reduced size video frames using a video pipeline, wherein the high resolution still image frames are processed concurrently with the reduced size video frames.

2. The method of claim 1, further comprising upsampling the reduced size video frames using motion estimation and information from the high resolution still image frames.

3. The method of claim 2, further comprising downsampling the high resolution still image frames, wherein the downsampled still image frames have same frame sizes as the upsampled video frames, and wherein blocks in the downsampled still image frames form a block pool.

4. The method of claim 3, further comprising:

comparing blocks in the block pool with corresponding blocks in the upsampled video frames until a best match block is found; and

copying the best match block into the corresponding blocks in the upsampled video frames.

5. The method of claim 1, wherein the processing the reduced size video frames step includes encoding the reduced size video frames into a standard format by a video transcoding agent.

6. The method of claim 1, wherein the processing the high resolution still image frames step includes processing the high resolution still image frames in real time.

7. The method of claim 1, wherein the processing the high resolution still image frames step comprises:

downsampling and demosaicing the high resolution still image frames using complex demosaicing algorithms; and

color correcting the high resolution still image frames using complex color correction algorithms.

8. The method of claim 1, further comprising compressing the reduced size video frames and the high resolution still image frames.

9. A joint video and still image pipeline for a video camera system, comprising:

one or more image sensors capable of concurrently acquiring regular size video frames and high resolution still image frames in burst mode, wherein the regular size video frames are downsampled into reduced size video frames;

a sensor controller capable of storing the regular size video frames and the high resolution still image frames acquired during the burst mode into a memory; and

one or more processors capable of concurrently processing the reduced size video frames and the high resolution still image frames acquired during the burst mode, wherein the reduced size video frames are processed using a video pipeline, and the high resolution still image frames are processed using a high resolution still image pipeline, and wherein the high resolution still image frames are processed concurrently with the reduced size video frames.

10. The joint video and still image pipeline of claim 9, wherein the reduced size video frames are upsampled using motion estimation and information from the high resolution still image frames.

11. The joint video and still image pipeline of claim 10, wherein the high resolution still image frames are downsampled to have the same frame sizes as the upsampled video frames, and wherein blocks in the downsampled still image frames form a block pool.

12. The joint video and still image pipeline of claim 11, wherein blocks in the block pool are compared with corresponding blocks in the upsampled video frames until a best match block is found, and wherein the best match block is copied into the corresponding blocks in the upsampled video frames.

13. The joint video and still image pipeline of claim 9, further comprising a video transcoding agent capable of encoding the reduced size video frames into a standard format.

14. The joint video and still image pipeline of claim 9, wherein the high resolution still image frames are processed in real time.

15. The joint video and still image pipeline of claim 9, wherein the processors are selected from a microprocessor, an application specific integrated circuit (ASIC), and a digital signal processor.

16. The joint video and still image pipeline of claim 9, wherein the processors downsample, demosaic, and color correct the high resolution still image frames using complex algorithms.

17. A computer readable medium providing instructions for concurrently processing digital video frames and high resolution still images in burst mode, the instructions comprising:

acquiring regular size video frames and high resolution still image frames in burst mode from one or more image sensors;

downsampling the regular size video frames into reduced size video frames, wherein the reduced size frames have frame sizes smaller than the regular size video frames;

processing the high resolution still image frames acquired during the burst mode using a high resolution still image pipeline; and

processing the reduced size video frames using a video pipeline, wherein the high resolution still image frames are processed concurrently with the reduced size video frames.

18. The computer readable medium of claim 17, further comprising instructions for upsampling the reduced size video frames using motion estimation and information from the high resolution still image frames.

19. The computer readable medium of claim 18, further comprising instructions for downsampling the high resolution still image frames, wherein the downsampled still image frames have same frame sizes as the upsampled video frames, and wherein blocks in the downsampled still image frames form a block pool.

20. The computer readable medium of claim 19, further comprising:

comparing blocks in the block pool with corresponding blocks in the upsampled video frames until a best match block is found; and

copying the best match block into the corresponding blocks in the upsampled video frames.